•	Raminda U. M	ladurawe et a	ITITITY
•	Application N Page 2	o.: 09/606,252	·
_	rage 2	implenting a first nock	ket implant into the semiconductor substrate from a first side of
6		Implanting a mor poor	
. 7	the gate; and	implement a second n	bocket implant into the semiconductor substrate from a second
. 8		impianting a second p	the second pocket
. 6	side of the gate, wherein the first pocket implant is approximately in contact with the second pocket		
JONA	implant.	,	
21	162	28. (Amended)	The method of claim 27 further comprising diffusing the first
	West imple	nt and the second nocks	et implant laterally in the semiconductor substrate.
7	роскет ппрта	it and the second post-	
$-t_{1}$	(2>	35 (Amended)	A method of fabricating a transistor in an integrated circuit
المحلن	device comp	rising:	
$\int_{1}^{\mathbf{V}}$ 3		providing a semicond	
4		forming a gate oxide	e on the semiconductor substrate;
5		forming a gate on the	e gate oxide;
6		implanting a first po	ocket implant and a second pocket implant into the semiconductor
1	substrate usi	ng the gate as a mask;	and
	diffusing the first and second pocket implants laterally causing the first pocket		
	implant to merge with the second pocket implant.		
	l	36. (Amended)	The method of claim 35 wherein the diffusing increases a
	2 reverse sho	t channel effect of the	transistor.
•	Z TOVOISO SITO		\
	1	37. (Amended)	The method of claim 35 further comprising implanting an
2 enhancement implant in the semiconductor substrate.			
~~~		29 (New)	A method of fabricating a transistor in an integrated circuit
1 ·			

(New)

A method of fabricating a transistor in an integrated circuit

device comprising:

providing a semiconductor substrate;

forming a gate oxide on the semiconductor substrate;

forming a gate on the gate oxide;

implanting a first pocket implant into the semiconductor substrate from a first side of

the gate at an angle; and

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implanting a second pocket implant into the semiconductor substrate from a second side of the gate at an angle.

wherein the concentration of pocket implant under the gate is nonuniform.

39. (New) The method of claim 38 further comprising diffusing the first pocket implant and the second pocket implant laterally in the semiconductor substrate.

40. (New) The method of claim 38 wherein the first pocket implant and the second pocket implant are implanted using the gate as a mask.